

Background Quality Report for the Officer Cadet Survey 2018/19

1. Introduction

1.1 Background

[The Officer Cadet Survey](#)¹ (OCS) was established in 2010/11 to understand officer cadets' experience of training at all four initial officer training colleges. It was created following the success of the Recruit Trainee Survey (RTS), a tri-service survey administered to understand Phase 1 recruits' and Phase 2 trainees' experience of training. The aims of the survey are to:

- Elicit attitudes towards the quality and benefits of training provided.
- Identify any incidences of bad or unfair treatment, i.e. discrimination, harassment and bullying.

All officer cadets who have completed at least two weeks training are invited to participate in the survey. All respondents complete an anonymous and confidential online questionnaire and are reassured that their responses cannot be attributed to them individually.

Performance is reported by Service. By analysing all responses over the 12-month period an overview of the results is provided focusing on key findings and longitudinal trends. This represents a summary of the continuous data available on an online portal used to inform Defence Training Establishments on their performance and to drive continuous improvement.

1.2 Questionnaire

The questionnaire includes all the key questions raised by the Defence Operational Capability Audit and was developed by a Tri-Service group. On commission, Ipsos MORI made minor adjustments to the format and design of the questionnaire. The content is based on the RTS questionnaire with some modifications.

Questions have been added, modified or removed during the course of the survey as part of a continuous improvement and review process. As such, there may be more trend data for questions which have not changed throughout the lifetime of the survey. In this reporting period changes were implemented to make the questionnaire in line with the RTS survey, with most changes in the fairness and equality sections.

1.3 Continuous Reporting

During the course of the year the Services use the survey results to monitor the views of officer cadets to inform continuous improvement activity and instigate changes to processes if required. The data is uploaded to an online portal to which each college has constant access. The online portal was implemented in June 2013 after consultation with various users of the results. Workshops have been conducted to gain feedback from survey administrators and the end users of the reports to support the process of continuous improvement.

1.4 Summary Production Process

There are seven stages in the OCS process. Each of these stages is briefly described below.

Stage 1: Questionnaire design

The questionnaire is based on the Recruit Trainee Survey and was designed by a Tri-Service group with technical expertise on questionnaire design provided by Ipsos MORI. A questionnaire review is conducted once a year to ensure the survey content remains relevant for all users – feedback is requested from attendees of the User Group meeting and the questionnaire is agreed by stakeholders at the Steering Group meeting.

Stage 2: Survey distribution and communications

Officer cadets who have completed at least two weeks training were invited to participate in an on-line anonymous survey between 1 April 2018 and 31 March 2019.

The four colleges included in the survey are:

- Navy: Britannia Royal Naval College Dartmouth (BRNC)

- Royal Marines: Commando Training Centre Royal Marines Lympstone (CTCRM)
- Army: Royal Military Academy Sandhurst (RMAS)
- RAF: Royal Air Force College Cranwell (RAFC)

Instructions are provided by Ipsos MORI to the training schools to explain how the survey should be administered. This includes a paragraph that should be read out to trainees explaining the purpose of the survey and how the findings will be used. The survey is hosted on-line and schools are given single use passwords; these passwords do not identify any individual. It is requested that the survey is conducted under controlled examination conditions, with an independent computer work station set up to enable each trainee to access the survey. Trainees should not leave the session early or discuss answers with each other.

Stage 3: Data input

Online survey responses are held securely on Ipsos MORI secure data collection platforms. These responses are made available on the online portal on a monthly basis and can be downloaded at any time in the process by the colleges and other Service users. Access to the online portal is restricted only to password holders.

Stage 4: Data cleaning at data collection stage

There are several stages of automated validation built into the data collection process namely only relevant questions are shown to respondents according to answers at previous questions and only surveys completed to the end are included in the final data set. Data cleaning is scripted into the survey itself in two ways:

- a) Routing instructions which dictates who is shown a question, for example a Phase 1 specific question will only be shown to Phase 1 recruits.
- b) Data cleaning at point of data capture with rules applied when responding. For example, if the answer to a question can only be Yes or No the question is set-up as a single code response allowing just one response. This can also apply to specific responses where multiple answers are allowed, for example, 'None of the above' would be set to be an exclusive response. This avoids capturing any irrelevant data.

Stage 5: Production of tables of results

Tables of results are produced, and T-tests are carried out (at the 99% confidence interval) on year on year comparisons (within Services only) and comparisons between Services (current year results only).

Stage 6: Analysis of key findings

The tables of results for each section are analysed and summaries of the key points and figures are collated into the Main Report. Verbatim answers to open-ended questions are collected but are not included in the report.

Stage 7: Data Checking

There are several stages of validation built into the data checking phase of the tables, main report and the online reporting platform. Data tables are designed and then programmed into a software analysis package. The data tables are built on previous data tables to ensure the continuation of any data edit rules and to ensure that only new changes need to be programmed. All data tables are checked against the raw summary data and also against the data portal. For the main report, the data is input by the team and then checked by a separate team.

Stage 8: Publication

The OCS is an Official Statistic and is produced and published in with the [Code of Practice for Statistics](#)². The publication date is pre-announced on the GOV.UK [Official Statistics Release Calendar](#)³. 24hr pre-release access is given to those listed on the published OCS pre-release access list. OCS is published on The Ministry of Defence external webpage (<https://www.gov.uk/government/organisations/ministry-of-defence/about/statistics>⁴).

2. Relevance

2.1 The principal users of the OCS publication are Defence People - Training, Education, Skills, Recruiting and Resettlement and the training colleges.

The statistical information is used to inform and measure training and development personnel strategy and policy so it is important that stakeholder requirements are represented.

OCS captures information on the following topic areas:

- Preparing for training
- Facilities and food
- Support
- Complaints procedure
- Fairness, equality and diversity
- Setbacks during training
- General
- Hopes for the future

The information can also be used to answer parliamentary questions and Freedom of Information requests.

The survey is anonymous.

3. Accuracy & Reliability

3.1 The OCS collects data from all officer cadets who have completed at least two weeks training. Survey estimates and error margins are published for each of the Services.

As the OCS does not achieve 100% response rates (the overall response rate achieved in OCS 2018/19 was 76%) there is always the risk that those who returned questionnaires have differing views from those who did not. We assume that all non-response is Missing at Random (MAR). This means it is assumed that those people who did not complete their survey's online have (on average) the same perceptions and attitudes as those who did respond.

Attitudes and perceptions are liable to change within the calendar year, for example, as a result of events or even due to the time of the year that the responses were collected (a seasonality affect). As the OCS is carried out over the course of the calendar year, results over time might be impacted by the varying times within the years that responses are completed.

3.2 Navy and Marines Integration

The approach to analysing the data for Royal Marines differs from Phase 1 training reported in the RTS. Data for Royal Marines in Phase1 are integrated into the Royal Navy's figures. This means combined results are presented for response rates, and individual question items throughout the report. For Phase 2 Royal Marines, their data is not combined. Phase 2 Royal Marines data is reported independently from Royal Navy data. This is the approach taken for the OCS report, the number of OCS Royal Marine interviews achieved in 2018/19 falls below 30 so although reported independently this is flagged to caution the low base size. This approach will be reviewed again and it is intended that from 2019/20 the Royal Marines will be integrated into the Royal Navy's figures for OCS data.

3.4 Statistical Testing

Statistical tests are carried out between various subgroups of the population and over time for certain key indicators. This includes the following:

Current vs last year:

- Army 2018/19 vs Army 2017/18
- Royal Navy 2018/19 vs Royal Navy 2017/18
- RAF 2018/19 vs RAF 2017/18
- Royal Marines 2018/19 vs Royal Marines 2017/18 (OCS and Phase 2 only)

Current year:

- Army vs Royal Navy vs RAF vs Royal Marines

3.5 Testing is done using independent t-tests where categorical dependent outcomes are split into component binary variables indicating the presence or absence of a response in each category using a '1', '0' coding. This equates to a t-test of a difference between the proportion answering yes to a particular categorical outcome at time t and the counterpart proportion at time t+1. The t-test, as with the z-test, is appropriate for testing differences between the means of two groups, i.e. whether the two group means are drawn from the same underlying population distribution or from different population distributions. A five per cent, two-tailed, Type I error is imposed for the significance tests. In this instance, the mean is defined as the proportion, i.e. the number in the given category divided by the total sample size responding to the question. The t-test is chosen over the z-test because it is more robust for smaller sample sizes, though, in the majority of cases presented in this report, either test would be viable. No tests are applied when the base is below 30. No adjustments are made in this report for multiple significance testing.

As part of the continuous improvement process, the application of statistical testing was reviewed in 2016/17. The review identified that the robustness of the report could be improved by reducing the number of pairwise comparisons for each item (from 29 to 6), and by reducing the significance level (from 0.05 to 0.01).

4. Timeliness and Punctuality

4.1 Timeliness

The OCS questionnaire is agreed approximately 2 months prior to the start of the data collection period to allow the survey to be scripted. The survey fieldwork period is a full year (from 1 April 2018 to 31 March 2019). Once the fieldwork is closed, the data is checked, analysis completed and the report produced and quality assured; The timing of data collection is driven by the Services to align the results with other military timescales.

The survey is continuously in field to ensure all officer cadets are given the opportunity to complete the survey. Fieldwork for the current survey closed on 31st March. The first draft of the report for review is typically produced around 8 weeks after the close of fieldwork; there is a lag between the end of the fieldwork and the publication of the findings.

The release date for this publication was pre-announced on the [MOD's Calendar of Upcoming Releases](#)³ section of GOV.UK.

4.2 Punctuality

All pre-announced publication deadlines have been met.

5. Accessibility and Clarity

5.1 Access to publications

This is the fifth time the OCS has been published as an official statistic. The report is published on the statistics section of GOV.UK as a PDF document (<https://www.gov.uk/government/collections/officer-cadet-survey>¹).

5.2 Clarity

A cover note is provided summarising the methodology of the survey as well as a link to the Background Quality Report, and the contact details of the responsible statistician. There is also a more detailed report published on 1 August 19. Within the report there is further information on the methodology and advice to users of caveats in the data.

6. Coherence and Comparability

6.1 Coherence

This is the only source of information about the specific experiences of Officer Cadets. There are no other tri-Service data sources that collect the same data with which to ensure coherence. However, the questionnaire and other methodological issues are harmonised with the Recruit Trainee Survey where possible, so that results can be compared. A key difference between the RTS and the OCS is that the RTS responses for the Royal Marines are included within the Royal Navy whilst the OCS includes the figures separately. This was

reviewed in 2018/19 and will be re-visited in 2019/20 with an intention to integrate Royal Marines and Royal Navy data in future.

6.2 Comparability over time

Given changes in response rates for the individual Services, tri-Service results are not comparable with previous years therefore are not presented. Time-series data at the Service level is presented where appropriate.

The MOD has previously held regular consultation meetings with users of Defence Official Statistics, which provided a forum for user feedback on their needs and perceptions. Proposed changes were set out at the consultation meetings in order to gain feedback from both internal and external users.

The MOD invites users to provide feedback to the statistical output teams on any of their publications or reports using the contact information on the front of the publication.

7. Trade-offs between Output Quality Components

7.1 Timeliness and costs versus Quality

The main trade-off is between timeliness and quality. Except for a small number of questions where it is felt relevant to analyse results by demographic questions, the reporting does not provide any cross-tabulations by each other, nor does the analysis employ any data reduction methods. This is so that the basic statistical information can be made available to policy users and the public as soon as possible in a clear and accessible format.

8. Assessment of User Needs and Perceptions

8.1 Description and Classifications of Users

Occupational Psychologists from the project team work closely with the main users of the survey within Defence to ensure that content reflects policy user requirements.

8.2 OCS Users/Uses

Internal uses of the OCS include

- Navy: Britannia Royal Naval College Dartmouth (BRNC)
- Royal Marines: Commando Training Centre Royal Marines Lympstone (CTCRM)
- Army: Royal Military Academy Sandhurst (RMAS)
- RAF: Royal Air Force College Cranwell (RAFC)
- Army Recruiting and Initial Training Command (ARITC)
- Flag Officer Sea Training (FOST)
- 22 Training Group RAF (22TrgGp)

MoD invites users to provide feedback to the statistical output teams on any of their publications or reports using the contact information on the front of the statistical bulletin.

9. Performance, Cost and Respondent Burden

9.1 Performance and Cost Effectiveness

The estimated cost of producing the OCS and the Recruit Trainee Survey reports is approximately £160k. This includes external contractor costs in production and running of the external survey, data cleaning and analysis and production of the report. Costs are closely monitored and MOD strive to balance quality and timeliness against costs. A census approach has been taken due to the small number of officer cadets.

9.2 Burden

Response to the OCS is voluntary, participant information is provided at the start of the questionnaire to encourage informed consent. Respondents are reassured that their answers are confidential and anonymous. The average time taken to complete the survey is around 20 minutes.

10. Confidentiality, Transparency and Security

10.1 Security

All staff involved in the OCS production process adhere to the MOD and Civil Service data protection regulations. All data is stored, accessed and analysed using restricted systems.

10.2 Transparency

We adhere to the principles and protocols laid out in the [Code of Practice for Official Statistics](#)² and comply with pre-release access arrangements. The [Defence Statistics Pre-Release Access lists](#)⁵ are available on GOV.UK. The report is published with details of the methodology alerting readers to any potential issues. Any significant errors identified after publication will result in revisions along with explanations as to the cause of the revisions.

11. References

	Reference	Website Location
1	OCS Report	https://www.gov.uk/government/collections/officer-cadet-survey
2	Code of Practice for Official Statistics	http://www.statisticsauthority.gov.uk/assessment/code-of-practice/code-of-practice-for-official-statistics.pdf
3	MOD's Timetable of Future Releases of National and Official Statistics	https://www.gov.uk/government/publications/mod-timetable-for-future-releases-of-national-and-official-statistics
4	National and Official Statistics published by MOD	https://www.gov.uk/government/organisations/ministry-of-defence/about/statistics
5	OCS pre-release access list	https://www.gov.uk/government/statistics/defence-statistics-pre-release-access-list
6	Defence Statistics Disclosure and Confidentiality Policy - Identifiable Survey Data	https://www.gov.uk/government/publications/defence-statistics-policies

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